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AFOSR supported research of Nobel Prize winners

by Angela Anand, Air Force Office of Scientific Research

ARLINGTON, VA. – Three scientists funded by AFOSR were awarded Nobel Prizes in Chemistry, Physics, and Medicine.

The Nobel Prize in Chemistry was shared by the three scientists who created a plastic that conducts electricity like a metal, a discovery that has opened up a new field of carbon-based electronics. Since 1988, one of the three scientists sharing the award, Dr. Alan J. Heeger, University of California Santa Barbara (UCSB), has received research funding support from AFOSR. Dr. Heeger received the Nobel Prize for fundamental research in conductive polymer plastics that started in the late 1970's. The importance of the research and its progression from Heeger's earlier and subsequent efforts is recognized by this prestigious award.

Dr. Herbert Kroemer, a Physics professor at UCSB, is one of the three scientists sharing this year's Physics Award. The Royal Swedish Academy of Sciences awarded them the Nobel Prize for developing electrical components that allow for fast communication using fiber optics and satellites. Kroemer received AFOSR support from 1995-2000.

Dr. Paul Greengard, head of the Laboratory of Molecular and Cellular Neuroscience, Rockefeller University, N.Y., won the 2000 Nobel Prize in Physiology or Medicine for his discovery of how dopamine and a number of other transmitters in the brain exert their action in the nervous system. His early work was supported by AFOSR in mid-1980s.

Col. Steven Reznick, Acting Director/Commander of AFOSR, when notified of the news from the Nobel Prize Committee on October 11, 2000, said, "I am very pleased to know that AFOSR has been instrumental in furthering the research efforts of these scientists." He further elaborated, "AFOSR sponsors the work of exceptional scientists who provide basic research—the core ingredient of Air Force technology".

This is the second consecutive year that AFOSR's support, along with several other sources of funding, has helped a researcher to receive a Nobel Prize for his work in chemistry. In 1999, Dr. Ahmed Zewail, the Linus Pauling professor of chemical physics and professor of physics at the California Institute of Technology, was the winner in chemistry, for pioneering "femtochemistry". This trailblazing research was supported by AFOSR.

The Air Force Office of Scientific Research, located in Arlington, Va., is one of the ten directorates of the Air Force Research Laboratory and it manages the basic research investment for the Air Force. Each year, AFOSR discovers, supports and furthers cutting edge research that creates the ingredients for maintaining the world's finest Air Force. @